NEW SPECIES OF XESTOCEPHALINAE (HOMOPTERA: CICADELLIDAE) FROM MEXICO, PANAMA, PERU, AND BRAZIL

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Abstract.—Three new species of Portanus, P. bilineatus (Peru), P. spinosus (Bolivia), and P. caudatus (Panama), and three new species of Xestocephalus, X. variabilis (Mexico), X. dubius (Bolivia), and X. similis (Brazil), are described.

Most species of both *Portanus* and *Xestocephalus* have rather definite color patterns. Miguel Estribi, working in the tropical laboratory of the Smithsonian Institution in Panama, has been able to separate the 25, or more, species of *Xestocephalus* known to occur in Panama by their color patterns.

Species of *Portanus* have previously been treated by Linnavuori (1959), Kramer (1964), and DeLong (1980). Species of *Xestocephalus* have previously been treated by Linnavuori (1959), DeLong and Linnavuori (1978), and DeLong et al. (1980).

Three species of *Portanus* and three species of *Xestocephalus* are described in this paper. All types are in the DeLong collection.

Portanus bilineatus DeLong, New Species Figs. 1–4

Description.—Length of male 6 mm, female unknown. Crown bluntly angled, apex rounded, a little longer at middle than wide at base between eyes. Crown except marginal gray area, mostly white with a black squarish spot, each side, just above and mesad of ocelli and a broad longitudinal dark brown stripe extending from brown spot to base along median line. A narrow lateral band extends from broad stripe, just basad of ocelli, then basally along each eye. Pronotum white with 4 dark brown, broad, longitudinal stripes: 2 at middle, widening near posterior margin, and 1 each side behind eye, along lateral margin to apex, then curved to merge with median stripe along posterior margin of pronotum. Scutellum pale gray with darker basal angles. Forewing brownish subhyaline, marked with white and darker brown spots.

Male genitalia, style elongate with main rod-shaped portion narrowed apically and finger-like, apex bluntly pointed. A short process arises at half length of blade, extending laterocaudally, apex bluntly pointed. Aedeagus short and broad, open anteroventrally, bearing a dorsal spine ¹/₄ length of aedeagus which extends ventrally, along caudal margin.

Holotype.—d, Sinchono, Peru, November 1934, J. G. Sanders, coll.

Comments.—*Portanus bilineata* resembles *P. minor* Kramer in general form and appearance and can be separated by the brown longitudinal stripes on the crown and pronotum and by the aedeagus which bears a spine at the apex.

Portanus spinosus DeLong, New Species Figs. 5-8

Description.—Length of male 4.5 mm, female 5 mm. Crown produced and bluntly angled. Crown brownish yellow. Pronotum dark brown with numerous small whitish spots. Scutellum yellowish with basal and apical angles brown. Forewing brownish subhyaline with dark brownish spots or areas, especially on costa and basal crossveins of apical cells. Most veins with alternating dashes of brown and white.

Female posterior margin of 7th sternum broadly convexly rounded.

Male genitalia, style narrow, elongate, apical portion pincer-like with the 2 portions of about equal length. Aedeagus slender, curved and elongate with apex bearing 4 slender apical processes. In apical view the median portion appears serrate just before slender, pointed, apical tip.

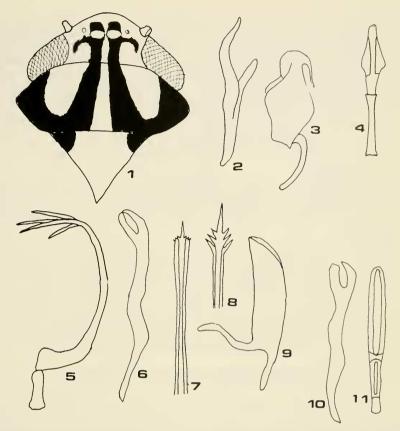
Types.—Holotype: δ , Santa Cruz, Bolivia, 21-IX-1980, D. Foster coll. Paratypes: 5δ , $1 \circ$, same data as holotype; 1δ , same data except 17-VIII-1980.

Comments.—Portanus spinosus resembles P. lex Kramer in form and appearance, but P. spinosus can be separated by the long slender curved aedeagus.

Portanus caudatus DeLong, New Species Figs. 9-11

Description.—Length of male 6 mm, female unknown. Crown produced, apex rounded, a little longer at middle than wide at base, between eyes. Crown white with a pair of small round black spots between ocelli at apex, just above margin, and an orange area just behind each black spot. Pronotum white with faint orange markings. Scutellum white. Forewing whitish sub-hyaline with faint orange markings on clavus, corium, and apical portion.

Male ganitalia, style pincer-like, with 2 processes about equal in length. Aedeagus elongate, apical portion curved and narrowed, apex bluntly point-



Figs. 1–11. 1–4, *Portanus bilineatus*. 5–8, *P. spinosus*. 9–11, *P. caudatus*. 1, Head, pronotum, and scutellum. 2, 6, 10, Style, laterally. 3, 5, 9, Aedeagus, laterally. 4, 7, 11, Aedeagus, ventrally. 8, Aedeagus, dorso-apical portion enlarged.

ed. Basal end bearing a rather slender finger-like process which is more than 1/3 length of aedeagus and is rounded apically.

Holotype.—&, Panama, Chiriqui, Fortuna 1058 m, 8°44'N, 82°15'W, 24-IX-1977, H. Wolda coll.

Comments.—*Portanus caudatus* is related to *P. eburatus* Kramer and can be separated by the whitish predominant color and the absence of apical processes.

Xestocephalus variabilis DeLong, New Species Figs. 12–15

Description.—Length of male 5.5 mm, female unknown. Crown produced and bluntly angled. Crown dull yellow with a brownish circular line extend-

ing from near apex to eye, curving around ocellus. This line joins a circular line arising near eye, extends to base each side of median ¼, and encloses a brownish spot. Pronotum pale yellow with a dark brown spot behind each eye enclosing 2 small yellowish spots. Anterior portion at middle and disc pale brownish. Scutellum yellowish with basal angles dark brown. Forewing whitish or pale yellow with some veins and numerous spots dark brown.

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Male genitalia, style with apical footlike portion with a definite "heel" which is formed by curvature of blade. Aedeagus V-shaped with the basal portion of "V" broadened. Ventral portion of shaft elongate, slender, tapered to a pointed curved apex. Dorsal portion of shaft ²/₃ length of ventral portion and robust.

Types.—Holotype: &, Vergel, Chiapas, Mexico, 19-V-1935, A. Dampf coll. Paratypes: 13 &, same data as holotype; 14 &, Finca Vergel, Chiapas, Mexico, 16,29-V-1935; 1 &, Mont. Grande, Chiapas, Mexico, 28-III-1931, A. Dampf coll.

Comments.—Xestocephalus variabilis has been collected only in the southeastern portion of Mexico, in the state of Chiapas. It is closely related to X. dedecus DeLong, Wolda, and Estribi from Panama and X. similis DeLong from Brazil but the basal portion of the aedeagal shaft is thicker and shorter, and the apical "foot" portion of the style is less angled with the blade. The aedeagus is the general shape of the aedeagus of the X. tessellatus-desertorum complex but bears no aedeagal processes.

Xestocephalus dubius DeLong, New Species Figs. 16–18

Description.—Length of male 3.5 mm, female 4 mm. Crown produced and rounded apically. Crown yellowish with brownish irrorations. Pronotum yellowish, rather uniformly mottled with brownish areas. Scutellum same as pronotum with dark brown basal angles. Forewing pale brownish with darker brown spots and areas. Costa broadly white near middle.

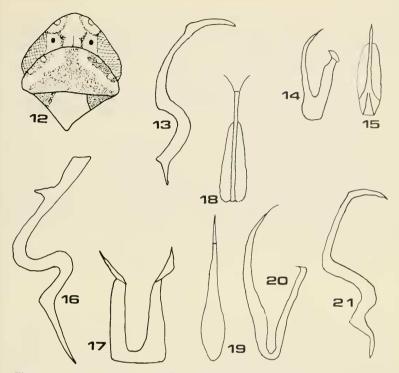
Female posterior margin of 7th sternum broadly, slightly, concavely rounded.

Male genitalia, style bearing a spine on ventral margin at more than $\frac{2}{3}$ its length, apical portion broadened just before pointed apex. Aedeagus broadly U-shaped, with 2 portions of shaft about equal in length. Dorsal portion narrowed to form a bluntly pointed apex. Ventral portion of shaft broader, pointed apically.

Types.—Holotype: δ , Teguipana, Bolivia, 12-X-1980, Don Foster coll. Paratypes: 13 δ , same data as holotype; 5 δ , Santa Cruz, Bolivia, 1-VI-1980, D. Foster coll.; 9 δ , same except 21-X-1980; 4 δ , Portachuela, Bolivia, 21-X-1980; 1 \Im , same as holotype except 21-VII-1980.

Comments.—Xestocephalus dubius is related to X. albometus DeLong,

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Figs. 12–21. 12–15, *Xestocephalus variabilis*. 16–18, *X. dubius*. 19–21, *X. similis*. 12, Head, pronotum, and scutellum. 13, 16, 21, Style, laterally. 14, 17, 20, Aedeagus, laterally. 15, 18, 19, Aedeagus, ventrally.

Wolda, and Estribi which has a similar style. They can be separated by comparing the bifid portion of the aedeagus which is longer in *albometus*.

Xestocephalus similus DeLong, New Species Figs. 19–21

Description.—Length of male 4 mm, female unknown. Head produced and bluntly pointed. Crown, pronotum, and scutellum dark brownish. Darker brown markings behind each eye and dark brown spots in basal angles of scutellum. Forewing rather uniformly pale brown with a few darker brown spots.

Male genitalia, style with apex elongate, footlike, "heel" scarcely visible. Apical footlike portion elongate, slender. Aedeagus V-shaped with the 2 portions slightly separated at base. Main shaft almost twice as long as ventral portion, tapered apically and with a slender sharp pointed apex, basal portion slender. Holotype .- d, Viscosa, Amazonas, Brazil, 14-X-1929.

Comments.—*Xestocephalus similis* is related to *X. superbus* VanDuzee and can be separated by the absence of the aedeagal processes and the distinct heel on the apical footlike portion of the style.

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